

IN THE CLAIMS:

Please amend claims 19 to 36, without prejudice, as follows:

19. (Amended) A method of anisotropic plasma etching a laterally defined structure in a silicon substrate using a process gas, the method comprising the steps of:

precipitating at least one passivating material at least on a side wall of the laterally defined structure at least one of prior to the anisotropic plasma etching and during the anisotropic plasma etching; and

adding a fluorine-delivering etching gas at least from time to time to the process gas, the fluorine-delivering etching gas including at least a compound selected from the group consisting of ClF_3 , BrF_3 and IF_5 .

20. (Amended) The method of claim 19, further comprising the step of adding at least one gas selected from the group consisting of SiF_4 , C_4F_5 , C_3F_6 , C_4F_{10} , C_3F_8 and C_2F_6 to the process gas as a gas forming the at least one passivating material.

21. (Amended) The method of claim 19, further comprising the step of adding at least one gas selected from the group consisting of O_2 , N_2O , NO , NO_x , CO_2 , Ar , NO_2 and N_2 to the process gas.

22. (Amended) The method of claim 19, further comprising the step of adding at least one of an additive, a fluoroalkane and NF_3 for consuming the at least one passivating material to the process gas, the at least one passivating material including one of SiO_2 and a fluoropolymer material, and the at least one additive including at least one of CHF_3 , CF_4 , C_2F_6 , C_3F_6 , C_4F_8 , C_4F_{10} and C_3F_8 .

23. (Amended) The method of claim 19, further comprising the step of adding at least one of H_2 , He and Ne to the process gas.

24. (Amended) A method of anisotropic plasma etching a laterally defined structure in a silicon substrate using a process gas, the method comprising the steps of:

precipitating at least one passivating material at least on a side wall of the laterally defined structure at least one of prior to the anisotropic plasma etching and during the anisotropic plasma etching; and

adding NF_3 to the process gas as an additive for consuming at least one of the at least one passivating material, SiO_2 and a fluoropolymer material.

25. (Amended) The method of claim 24, further comprising the step of adding a fluorine-delivering etching gas to the process gas, the fluorine-delivering etching gas including at least one compound selected from the group consisting of SF_6 , ClF_3 , BrF_3 and IF_5 .

26. (Amended) The method of claim 24, further comprising the step of adding at least one gas selected from the group consisting of SiF_4 , C_4F_8 , C_3F_6 , C_4F_{10} , C_3F_8 and C_2F_6 to the process gas as a gas forming the at least one passivating material.

27. (Amended) The method of claim 24, further comprising the step of adding at least one gas selected from the group consisting of O_2 , N_2O , NO , NO_x , CO_2 , Ar , NO_2 and N_2 to the process gas.

28. (Amended) The method of claim 24, further comprising the step of adding at least one of H_2 , He and Ne to the process gas.

29. (Amended) A method of anisotropic plasma etching a laterally defined structure in a silicon substrate using a process gas, the method comprising the steps of:

precipitating a passivating material on at least one side wall of the laterally defined structure at least one of prior to the anisotropic plasma etching and during the anisotropic plasma etching; and

adding at least one of H_2 , He and Ne to the process gas.

30. (Amended) The method of claim 29, further comprising the step of adding at least one fluorine-delivering etching gas to the process gas, the fluorine-

delivering etching gas including at least one of a compound selected from the group consisting of SF_6 , ClF_3 , BrF_3 and IF_5 .

31. (Amended) The method of claim 29, further comprising the step of adding at least one gas selected from the group consisting of SiF_4 , C_4F_8 , C_3F_6 , C_4F_{10} , C_3F_8 and C_2F_6 to the process gas as a gas forming the at least one passivating material.

32. (Amended) The method of claim 29, further comprising the step of adding at least one gas selected from the group consisting of O_2 , N_2O , NO , NO_x , CO_2 , Ar , NO_2 and N_2 to the process gas.

33. (Amended) The method of claim 29, further comprising the step of adding at least one of an additive, a fluoroalkane and NF_3 to the process gas for consuming at least one of the at least one passivating material, SiO_2 and a fluoropolymer material, the additive including one of CHF_3 , CF_4 , C_2F_6 , C_3F_6 , C_4F_8 , C_4F_{10} and C_3F_8 .

34. (Amended) A method of anisotropic plasma etching a laterally defined structure in a silicon substrate using a process gas, the method comprising the steps of:

precipitating at least one passivating material on at least a side wall of the laterally defined structure at least one of prior to the anisotropic plasma etching and during the anisotropic plasma etching;

adding at least one fluorine-delivering etching gas to the process gas, the at least one fluorine-delivering etching gas including at least one compound selected from the group consisting of ClF_3 , BrF_3 and IF_5 ;

adding NF_3 to the process gas as an additive for consuming the at least one passivating material; and

adding at least one of H_2 , He , and Ne to the process gas.

35. (Amended) The method of claim 34, further comprising the step of adding at least one gas selected from the group consisting of SiF_4 , C_4F_8 , C_3F_6 , C_4F_{10} ,